

House Study Bill 695

HOUSE FILE _____
BY (PROPOSED COMMITTEE ON
ENVIRONMENTAL PROTECTION
BILL BY CHAIRPERSON
GREINER)

Passed House, Date _____ Passed Senate, Date _____
Vote: Ayes _____ Nays _____ Vote: Ayes _____ Nays _____
Approved _____

A BILL FOR

1 An Act providing for the regulation of air quality, and making
2 penalties applicable.
3 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:
4 TLSB 6597YC 80
5 da/gg/14

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1 1 Section 1. Section 455B.133, subsection 4, unnumbered
1 2 paragraph 1, Code 2003, is amended to read as follows:
1 3 Adopt, amend, or repeal emission limitations or standards
1 4 relating to the maximum quantities of air contaminants that
1 5 may be emitted from any air contaminant source. The standards
1 6 or limitations adopted under this section shall not exceed the
1 7 standards or limitations promulgated by the administrator of
1 8 the United States environmental protection agency or the
1 9 requirements of the federal Clean Air Act as amended through
1 10 January 1, 1991. ~~This does not prohibit the~~ The commission
1 11 ~~from adopting shall not adopt~~ a standard for a source or class
1 12 of sources for which the United States environmental
1 13 protection agency has not promulgated a standard. This ~~also~~
1 14 ~~section~~ does not prohibit the commission from adopting an
1 15 emission standard or limitation for infectious medical waste
1 16 treatment or disposal facilities which exceeds the standards
1 17 or limitations promulgated by the administrator of the United
1 18 States environmental protection agency or the requirements of
1 19 the federal Clean Air Act as amended through January 1, 1991.
1 20 The commission shall not adopt an emission standard or
1 21 limitation for infectious medical waste treatment or disposal
1 22 facilities prior to January 1, 1995, which exceeds the
1 23 standards or limitations promulgated by the administrator of
1 24 the United States environmental protection agency or the
1 25 requirements of the federal Clean Air Act, as amended through
1 26 January 1, 1991, for a hospital, or a group of hospitals,
1 27 licensed under chapter 135B which has been operating an
1 28 infectious medical waste treatment or disposal facility prior
1 29 to January 1, 1991. ~~The commission shall not adopt or enforce~~
1 30 ~~rules under this section that apply to an animal feeding~~
1 31 ~~operation as provided in chapter 459.~~

1 32 Sec. 2. NEW SECTION. 455B.133A HEALTH EFFECT ADVISORY
1 33 PANEL.

1 34 Concurrent with the field study conducted pursuant to
1 35 section 459.207, a health effect advisory panel shall be
2 1 convened as provided in this section.

2 2 1. a. The director shall request interested organizations
2 3 to appoint voting members to the panel as follows:

2 4 (1) The national research council of the national
2 5 academies, which may appoint up to three members.

2 6 (2) The agency for toxic substances and disease registry,
2 7 which may appoint one member.

2 8 (3) The university of Iowa or the national institutes of
2 9 health, which may appoint one member.

2 10 (4) Iowa State university, which may appoint one member.

2 11 (5) The Iowa department of public health, which may
2 12 appoint one member.

2 13 (6) The United States department of agriculture, which may
2 14 appoint one member.

2 15 (7) The department of agriculture and land stewardship,
2 16 which may appoint one member.

2 17 Each organization that appoints a member to the panel may
2 18 also appoint an alternate who shall serve as the
2 19 organization's representative on the panel if the principal
2 20 appointee is unable to attend.

2 21 b. The director shall appoint the following persons who

2 22 shall serve on the panel as ex officio, nonvoting members:

2 23 (1) A person who owns a confinement feeding operation that
2 24 includes a structure which stores liquid manure, other than a
2 25 small animal feeding operation.

2 26 (2) A person who owns a confinement feeding operation that
2 27 includes a structure which stores manure exclusively on a dry=
2 28 matter basis, other than a small animal feeding operation.

2 29 (3) A person who resides within one mile of a confinement
2 30 feeding operation, other than a small animal feeding
2 31 operation.

2 32 (4) A person who is actively engaged in a manufacturing
2 33 business, other than the manufacturing of anhydrous ammonia.

2 34 (5) A person who is actively engaged in a business
2 35 involved in the manufacturing, storage, or delivery of
3 1 anhydrous ammonia.

3 2 (6) A person who represents a municipality in this state
3 3 and is actively engaged in operating a wastewater treatment
3 4 facility.

3 5 (7) A person who is employed by the department.

3 6 Each ex officio member may appoint an alternate who shall
3 7 serve in place of the principal member appointed by the
3 8 director whenever the principal member is unable to attend a
3 9 meeting.

3 10 2. a. The voting members of the panel shall elect a
3 11 chairperson from the panel's membership. Meetings may be
3 12 called by the chairperson or a majority of the voting members.
3 13 A majority of the panel's voting members constitutes a quorum.
3 14 An affirmative vote of a majority of the entire voting
3 15 membership is necessary for the panel to take a substantive
3 16 action other than adjourning a meeting.

3 17 b. The voting members shall serve without per diem, but
3 18 shall be reimbursed by the department for actual and necessary
3 19 expenses. The ex officio members shall serve without per diem
3 20 expenses.

3 21 3. Upon request by the panel, the department shall provide
3 22 clerical and technical staffing, materials, and meeting rooms
3 23 necessary for the panel's operations.

3 24 4. The panel is a government body for purposes of chapters
3 25 21 and 22.

3 26 5. a. The panel may advise the department and shall
3 27 submit interim reports and a final report to the general
3 28 assembly regarding health effect levels as defined in section
3 29 459.207, if any, for odor. The report shall include a
3 30 determination whether a health effect level for odor is
3 31 determinable based on a reasonable degree of scientific
3 32 certainty. If the panel finds that it is determinable, the
3 33 report shall contain findings and recommendations regarding
3 34 the health effect levels of odor.

3 35 b. The panel shall submit an interim report to the general
4 1 assembly on or before January 15 of each year. The panel's
4 2 final report shall contain findings and recommendations.

4 3 c. The commission shall not adopt a rule providing a
4 4 health effect level for odor until after the panel submits its
4 5 final report to the general assembly and a statute that
4 6 provides for the health effect level for odor is enacted.

4 7 Sec. 3. Section 459.207, Code 2003, is amended by striking
4 8 the section and inserting in lieu thereof the following:

4 9 459.207 ANIMAL FEEDING OPERATIONS == AIRBORNE POLLUTANTS
4 10 CONTROL.

4 11 1. As used in this section:

4 12 a. "Airborne pollutant" means hydrogen sulfide, ammonia,
4 13 or odor.

4 14 b. "Health effect level" means a level and duration of
4 15 exposure that causes a material and verifiable physical
4 16 disease when humans are exposed to an airborne pollutant for
4 17 periods consistent with the average exposure periods and
4 18 levels recorded at a separated location. For hydrogen sulfide
4 19 and ammonia, the health effect levels are the doses and
4 20 durations as defined in subsection 4.

4 21 c. "Separated location" means a location or object from
4 22 which a separation distance is required under section
4 23 455B.134, subsection 3, paragraph "f", section 459.202, or
4 24 section 459.204, other than a public thoroughfare.

4 25 2. The department shall conduct a comprehensive field
4 26 study to monitor the level of airborne pollutants from animal
4 27 feeding operations in this state, including but not limited to
4 28 each type of confinement feeding operation structure. The
4 29 field study as to each airborne pollutant shall be conducted
4 30 and shall continue for a period of not less than three years.
4 31 The monitoring period shall begin with the start of the
4 32 collection of data for such airborne pollutant. The field

4 33 study shall include a statistically significant sample of each
4 34 type of confinement feeding operation structure located in
4 35 this state.

5 1 3. The department shall collect monitoring data only from
5 2 separated locations as provided in this subsection.
5 3 Monitoring data collected at locations other than as provided
5 4 in this subsection shall be invalid.

5 5 a. For purposes of measuring hydrogen sulfide and ammonia,
5 6 monitoring data is considered to be taken at a separated
5 7 location if the monitor is located within three hundred feet
5 8 of the following:

5 9 (1) A structure that constitutes the separated location.

5 10 (2) The boundaries of a public use area.

5 11 However, in no event shall monitoring data be collected at
5 12 a distance closer than the required minimum separation
5 13 distance that applies to the manure application or confinement
5 14 feeding operation structure.

5 15 b. For purposes of measuring odor, monitoring data is
5 16 considered to be taken at a separated location if the
5 17 monitoring data is collected at a location that is not closer
5 18 than the required minimum separation distance that applies to
5 19 the manure application or confinement feeding operation
5 20 structure.

5 21 4. a. For an airborne pollutant that is hydrogen sulfide,
5 22 the health effect levels are as follows:

5 23 (1) The acute health effect level is a concentration dose
5 24 exceeding seventy parts per billion for the duration of
5 25 fourteen consecutive days.

5 26 (2) The chronic health effect level is a concentration
5 27 dose exceeding thirty parts per billion for the duration of
5 28 three hundred sixty-four consecutive days.

5 29 b. For an airborne pollutant that is ammonia, the health
5 30 effect levels are as follows:

5 31 (1) The acute health effect level is a concentration dose
5 32 exceeding one thousand seven hundred parts per billion for the
5 33 duration of fourteen consecutive days.

5 34 (2) The chronic health effect level is a concentration
5 35 dose exceeding three hundred parts per billion for the
6 1 duration of three hundred sixty-five or more consecutive days.

6 2 c. A consecutive day for purposes of this subsection shall
6 3 be determined as provided in this paragraph. Hourly averages
6 4 must first be computed by averaging all valid five-minute
6 5 averages recorded by the data acquisition system in that hour.
6 6 An hourly average is considered valid if at least forty-five
6 7 minutes of valid five-minute averages are recorded by the data
6 8 acquisition system. A sampling day consists of twenty-four
6 9 nonoverlapping hours beginning from midnight on a given day to
6 10 midnight on the following day. A day of continuous monitoring
6 11 data is valid if at least eighteen hours of valid hourly
6 12 averages have been recorded at the monitoring location. To
6 13 determine the daily average, each of the valid hourly
6 14 concentrations associated with a sampling day shall be
6 15 averaged and truncated to one part per billion. The daily
6 16 average shall be used to compare with the appropriate health
6 17 effect level to determine whether the requisite number of
6 18 consecutive daily averages exceeds the applicable
6 19 concentration dose.

6 20 5. After completion of the field study, the commission may
6 21 adopt rules pursuant to chapter 17A, except section 17A.4,
6 22 subsection 2, and section 17A.5, subsection 2, paragraph "b",
6 23 to do any of the following:

6 24 a. Establish recommended best management practices,
6 25 mechanisms, processes, or infrastructure designed to reduce
6 26 airborne pollutants from animal feeding operations in
6 27 accordance with this section. The recommended best management
6 28 practices, mechanisms, processes, or infrastructure may be
6 29 developed for a particular air pollutant and for a specific
6 30 type of confinement feeding operating structure if the data
6 31 from the field study demonstrates to a reasonable degree of
6 32 scientific certainty that a particular airborne pollutant from
6 33 that type of confinement feeding operation structure is
6 34 present at the separated location at a level exceeding a
6 35 health effect level. The department shall consult with the
7 1 department of agriculture and land stewardship, Iowa state
7 2 university college of agriculture, and livestock producers who
7 3 may be impacted before establishing recommended best
7 4 management practices, mechanisms, processes, or
7 5 infrastructure. The department shall provide a procedure for
7 6 the approval of alternative or experimental airborne control
7 7 strategies to reduce the airborne pollutant from the
7 8 confinement feeding operation.

7 9 b. Establish rules for the enforcement of a health effect
7 10 level only in accordance with this subsection. The commission
7 11 may adopt rules providing for the enforcement of a health
7 12 effect level for a particular airborne pollutant for a
7 13 specific type of confinement feeding operation structure if
7 14 all of the following apply:

7 15 (1) The data from the field study demonstrates to a
7 16 reasonable degree of scientific certainty that the airborne
7 17 pollutant from that type of confinement feeding operation
7 18 structure is present at separated locations at levels
7 19 exceeding the health effect level.

7 20 (2) A statute that provides for the health effect level is
7 21 enacted.

7 22 The commission shall not adopt rules if the data does not
7 23 demonstrate to a reasonable degree of scientific certainty
7 24 that the airborne pollutant from a specific type of
7 25 confinement feeding operation structure is present at
7 26 separated locations at levels that exceed the health effect
7 27 level.

7 28 6. If the commission adopts rules under subsection 5, the
7 29 department may monitor the level of airborne pollutants at a
7 30 separated location in accordance with subsection 3. However,
7 31 the department shall not monitor the level of airborne
7 32 pollutants unless a written complaint is received from the
7 33 owner or occupant of the separated location. The department
7 34 shall monitor the level of airborne pollutants by collecting
7 35 data at the separated location owned or occupied by the person
8 1 making the complaint. In providing for the enforcement of the
8 2 health effect level, the department shall take all
8 3 measurements at the separated location in accordance with
8 4 subsection 3.

8 5 a. In using monitoring equipment to collect data for
8 6 hydrogen sulfide, equipment shall incorporate a thermal
8 7 oxidizer and a reference method for the measurement of ambient
8 8 concentrations of sulfur dioxide that meet all calibrations,
8 9 standards, and testing requirements established by the United
8 10 States environmental protection agency. In using monitoring
8 11 equipment to collect data for ammonia, the equipment shall
8 12 incorporate a thermal oxidizer and a reference method for the
8 13 measurement of ambient concentrations of nitrogen dioxide that
8 14 meet all calibrations, standards, and testing requirements
8 15 established by the United States environmental protection
8 16 agency.

8 17 b. The department shall not enforce a rule adopted
8 18 pursuant to this section based on data, if any of the
8 19 following apply to the collection of such data:

8 20 (1) The data is collected from a site other than a
8 21 separated location as provided in this section.

8 22 (2) The data collected exceeds the health effect level but
8 23 is within the monitoring equipment's margin of error as
8 24 established pursuant to rules which shall be adopted by the
8 25 commission.

8 26 (3) The monitoring equipment used to collect data for
8 27 hydrogen sulfide or ammonia does not meet the specifications
8 28 for such equipment as required by this section or rules
8 29 adopted by the commission.

8 30 c. If the department determines that a violation of a
8 31 health effect level exists, the department shall conduct an
8 32 investigation to trace the source of the airborne pollutant
8 33 after the department has collected data measuring an airborne
8 34 pollutant from a separated location. The department may enter
8 35 the premises of a confinement feeding operation in compliance
9 1 with section 455B.103. The department shall comply with
9 2 standard biosecurity requirements customarily required by the
9 3 confinement feeding operation that are necessary to control
9 4 the spread of disease among an animal population.

9 5 d. If the department determines that a violation of a
9 6 health effect level is caused by an airborne pollutant from a
9 7 confinement feeding operation structure, the department shall
9 8 issue a written notice to the owner of the confinement feeding
9 9 operation. The notice shall require that the owner reduce the
9 10 emission of the airborne pollutant to meet the health effect
9 11 level. The notice shall expire one year from the date of its
9 12 issuance. The owner shall not be in violation of state law
9 13 for failing to comply with the notice during its effective
9 14 period. If the department determines that a violation of a
9 15 health effect level is caused by an airborne pollutant from
9 16 the confinement feeding operation structure after the notice
9 17 has expired, the department may commence an enforcement action
9 18 as provided in this chapter. However, the owner shall not be
9 19 subject to an enforcement action for the period that the

9 20 department's notice is in effect, and shall not be subject to
9 21 the imposition of penalties based on a violation during that
9 22 period.

9 23 7. The commission's rules providing for a health effect
9 24 level shall not exceed a standard or limitation applying to
9 25 the same health effect level pursuant to the requirements of
9 26 the federal Clean Air Act as amended through January 1, 1991,
9 27 or regulations promulgated by the United States environmental
9 28 protection agency. This section shall supersede the
9 29 commission's authority under section 455B.133.

9 30 EXPLANATION

9 31 GENERAL. This bill amends provisions in Code chapters 455B
9 32 and 459, regulating air quality administered by the department
9 33 of natural resources. Code chapter 455B, division II,
9 34 provides general air quality regulatory authority to the
9 35 department, and Code chapter 459 specifically regulates animal
10 1 feeding operations and especially confinement feeding
10 2 operations.

10 3 REGULATION OF AIR CONTAMINANTS. Code section 455B.133
10 4 authorizes the department to adopt rules that establish
10 5 standards for air contaminants that may be emitted from any
10 6 source. The standards cannot exceed those promulgated by the
10 7 United States environmental protection agency, but the Code
10 8 section does authorize the department to adopt standards for
10 9 emissions from other sources. The bill provides that the
10 10 commission is prohibited from adopting a standard for these
10 11 other sources. The bill also provides that the department
10 12 cannot adopt rules that apply to animal feeding operations
10 13 other than as provided in Code chapter 459. That Code chapter
10 14 provides authority to the department to regulate animal
10 15 feeding operations, including the emission of airborne
10 16 pollutants.

10 17 HEALTH EFFECT ADVISORY PANEL. The bill creates new Code
10 18 section 455B.133A, which requires the establishment of a
10 19 health effect advisory panel. The panel must be composed of a
10 20 number of persons representing public and private
10 21 organizations, including regulators, the scientific community,
10 22 animal agriculture, rural residents, and industry. The
10 23 purpose of the panel is to advise the department and to issue
10 24 interim reports and a final report to the general assembly
10 25 regarding health effect levels of airborne pollutants. The
10 26 department of natural resources is prohibited from adopting
10 27 standards for a health effect level before the panel submits
10 28 its final report to the general assembly and a health effect
10 29 level is established by statute.

10 30 AIR POLLUTANTS EMITTED FROM ANIMAL FEEDING OPERATIONS.
10 31 Current Code section 459.207 requires the department to
10 32 conduct a comprehensive field study to monitor the level of
10 33 airborne pollutants (defined as hydrogen sulfide, ammonia, or
10 34 odor) emitted from animal feeding operations. The Code
10 35 section provides that plans and programs established by the
11 1 department cannot provide for the enforcement of an air
11 2 quality standard prior to December 1, 2004. The Code section
11 3 also provides that any air quality standard established by the
11 4 department must be based on, and enforced at, distances
11 5 measured from a confinement feeding operation structure to a
11 6 separated location defined as a residence, school, church,
11 7 business, or public use area (but not public thoroughfare).
11 8 In providing for enforcement, the department must take all
11 9 initial measurements at the separated location. If the
11 10 department determines that a violation of a standard exists,
11 11 it may conduct an investigation to trace the source of the
11 12 airborne pollutant.

11 13 The bill rewrites Code section 459.207. The bill provides
11 14 that departmental standards must be based on a "health effect
11 15 level" that is at a level and duration of exposure that causes
11 16 a material and verifiable physical disease consistent with the
11 17 average exposure periods and levels recorded at a separated
11 18 location.

11 19 The bill provides that the department must conduct a
11 20 comprehensive field study to monitor the level of airborne
11 21 pollutants emitted from animal feeding operations for a period
11 22 of at least three years. The bill establishes minimum
11 23 separation distances for monitoring hydrogen sulfide and
11 24 ammonia, and odor (if such measurements may be scientifically
11 25 taken). The bill provides specific concentrations for
11 26 hydrogen sulfide and ammonia which constitute health effect
11 27 levels.

11 28 The bill requires the department to establish best
11 29 management practices, mechanisms, processes, or infrastructure
11 30 designed to reduce airborne pollutants. The department must

11 31 also provide a procedure for the approval of alternative or
11 32 experimental airborne control strategies. The bill prescribes
11 33 how the department may monitor the level of airborne
11 34 pollutants at particular locations.

11 35 The bill establishes technical standards for equipment used
12 1 to measure airborne pollutants, including a thermal oxidizer
12 2 and a reference method for the measurement of ambient
12 3 concentrations as set out by the United States environmental
12 4 protection agency. The bill restricts enforcement of a
12 5 standard if data are not collected as required in the bill.
12 6 It also provides that if the department determines that a
12 7 violation of a health effect level exists, it must provide the
12 8 owner of the confinement feeding operation with a one-year
12 9 grace period in order to comply with the department's
12 10 standards. The department's rules cannot exceed a standard
12 11 adopted by the United States environmental protection agency.

12 12 A person who violates a provision of the bill is subject to
12 13 a civil penalty which is established, assessed, and collected
12 14 in the same manner as provided in Code section 455B.109. That
12 15 Code section requires the department to establish a schedule
12 16 of penalties for violations. A civil penalty may be up to
12 17 \$10,000 and each day of a violation constitutes a separate
12 18 offense.

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